

REMARKS

This Amendment is in response to the Office Action mailed on September 15, 2006. Claims 2 and 12 are amended. Claim 2 is amended editorially and is supported, for example, in the specification on page 4, lines 6-11. Claim 12 is amended to correct an informality. No new matter is added. Claims 1-2, 4, 6, 12 and 24 remain pending.

§103(a) Rejections:

Claims 1, 2, 4, 6, 12 and 24 are rejected as being obvious over Choi (US Patent No. 5,764,621) in view of Tanaka (JP Publication No. 10-112066). This rejection is traversed.

Claim 1 is directed to an optical information recording medium that requires, among other features, a plurality of information layers, where each information layer has a sector structure including a sector address and a data area that are divided in a circumferential direction. Also, the positions of the sector addresses of the respective information layers coincide in both the circumferential direction and a radial direction.

Choi does not teach or suggest these features. Choi is directed to an optical disk with a plurality of recording layers. However, nowhere does Choi teach or suggest that each information layer has a sector structure that includes a sector address and a data area. Moreover, even if a sector structure with a sector address and a data area is inherently present in all disks when you read and write on the layers, nowhere does Choi teach or suggest that each sector address data area of the sector structure are divided in a circumferential direction or that the positions of the sector addresses of the respective information layers coincide in both the circumferential direction and a radial direction.

The combination of Choi and Tanaka does not overcome these deficiencies. Tanaka is directed to an information recording medium with a three-layer structure used to increase the storage capacity. Each layer is formed with a different sector size (i.e., the length of the data area) (see Figure 1 and paragraphs [0008]-[0009]). Thus, even if the first sectors positions coincide, as shown in Figure 1, the next sector positions (represented by SM) cannot coincide because of the varying lengths of the data areas in each layer. For at least these reasons, claims 1 is not unpatentable over the combination

of Choi and Tanaka and should be allowed. Claim 2 depends from claim 1 and should be allowable for at least the same reasons.

Claim 4 is directed to an optical information recording medium that requires, among other features, a plurality of information layers, where each information layer has a sector structure including a sector address and a data area that are divided in a circumferential direction. The positions of the sector addresses of the respective information layers coincide in the circumferential direction. Also, a sector position identifier is provided to identify the position of each information layer in the circumferential direction and is located at a radial position other than the data area and the sector address in each information layer.

As described above, the combination of Choi and Tanaka cannot disclose an optical information recording medium whereby sector addresses of the respective information layers coincide in the circumferential direction. Furthermore, neither Choi nor Tanaka teach or suggest a sector position identifier is provided to identify the position of each information layer in the circumferential direction and is located at a radial position other than the data area and the sector address in each information layer. As discussed above, nowhere does Choi teach or suggest a sector structure with a sector address and a data area. Therefore, Choi cannot teach or suggest a sector position identifier that is located at a radial position other than the data area and the sector address in each information layer. Furthermore, Tanaka merely discloses a sector structure with a sector address and a data area. Nowhere does Tanaka teach or suggest the sector position identifier of claim 4. For at least these reasons, claim 4 is not unpatentable over the combination of Choi and Tanaka and should be allowed. Claims 6 and 24 depend from claim 4 and should be allowable for at least the same reasons.

Claim 12 is directed to an optical information recording medium that requires, among other features, a plurality of information layers, where each information layer has spiral continuous guide grooves and a sector address comprising a recording mark formed by irradiation of light beams. The positions of the sector addressees of the respective information layers coincide in the circumferential direction. As discussed above, nowhere does Choi or Tanaka teach or suggest that positions of the sector addressees of

the respective information layers coincide in the circumferential direction. Thus, claim 12 is allowable for at least the same reasons as claims 1 and 4 discussed above.

Satoh Reference (US Patent No. 5,428,597):

This prior art reference is cited in combination with Choi to disclose the optical information recording medium of claim 2. This rejection is traversed. Claim 2 is amended such that the Satoh reference is now moot. Moreover, claim 2 depends from claim 1, and should be allowed for at least the same reasons described above. Applicants do not concede the correctness of this rejection as applied to claim 2.

Moreover, in order to expedite the prosecution of this case the following distinctions of claims 1, 4 and 12 over Satoh are noted.

As described above, claims 1, 4 and 12 are each directed to a distinct optical information recording medium, in which each optical recording medium requires the feature that positions of the sector addresses of the respective information layers coincide in at least the circumferential direction.

Satoh discloses a multi-layered optical disk in which a recording layer (7c) has track/sector identification sections ID_{TS} (sector addresses). However, nowhere does Satoh disclose that the (see column 5, lines 19-21 and Figure 8) the positions of the sector addresses of the respective information layers coincide in a circumferential direction, as required by claims 1, 4 and 12, or in a radial direction, as required by claim 1. Accordingly, Satoh in combination with Choi or Tanaka does not teach or suggest all of the features of claims 1, 4 and 12.

Conclusion:

Applicants respectfully assert claims 1-2, 4, 6, 12 and 24 are now in condition for allowance. If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Applicants' primary attorney-of record, Douglas P. Mueller (Reg. No. 30,300), at (612) 455-3804.



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